

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 2, 4, 5, and 22-25 are pending in the application, with claim 22 being the independent claim. Claims 2, 4, and 5 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. New claims 22-25 are sought to be added. Claims 8-21 have been withdrawn from consideration. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Rejections under 35 U.S.C. § 112***

In the Office Action, claims 1-7 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner stated that "[r]egarding claim 1, applicant should clarify what is intended by 'a differential current flowing through the first in-silicon inductor and the second in-silicon [inductor] flows in the same direction ...'" (Office Action, p. 2). Independent claim 1 has been canceled by the above amendment.

New independent claim 22 recites "wherein a first current in the first in-silicon inductor and a second current in the second in-silicon inductor flow in a same direction in corresponding turns of the first in-silicon inductor and the second in-silicon inductor when a differential signal is applied to an input of the first in-silicon inductor and an

input of the second in-silicon inductor." Applicants submit that new claim 22 is definite under 35 U.S.C. §112, second paragraph. Reconsideration and withdrawal of this ground of rejection is therefore respectfully requested.

***Rejections under 35 U.S.C. § 103***

In the Office Action, claims 1-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nielson, U.S. Patent No. 6,867,677 (Nielson) in view of Yue, U.S. Patent No. 6,717,502 (Yue). Applicants respectfully traverse this rejection.

Independent claim 1 has been canceled by the above amendment. Nielson describes a push-pull amplifier having a pair of load inductors which spiral in opposite senses. Yue describes a balun having interleaved inductors. (Yue, FIGs. 4a, 4b1; col. 3, lines 30-37). Applicants submit that the combination of Nielson and Yue does not teach or suggest each and every element of new independent claim 22, reproduced below.

22. A device, comprising:

    a first circuit;  
    a second circuit; and

    an impedance matching circuit coupled between the first circuit and the second circuit, wherein the impedance matching circuit includes:

        a first in-silicon inductor spiraling in a first direction, wherein the first in-silicon inductor has a plurality of turns, and

        a second in-silicon inductor spiraling in a second direction opposite the first direction, wherein the second in-silicon inductor has a plurality of turns,

    wherein the first in-silicon inductor is interleaved with the second in-silicon inductor, and

    wherein a first current in the first in-silicon inductor and a second current in the second in-silicon inductor flow in a same direction in corresponding turns of the first in-silicon inductor and the second in-silicon inductor when a differential signal is applied to an input of the first in-silicon inductor and an input of the second in-silicon inductor.

For at least the foregoing reasons, Applicants submit that independent claim 22 is patentable over the combination of Nielson and Yue. Furthermore, for at least these reasons, and further in view of their own features, claims 2, 4, 5, and 23-25 are patentable over the combination of Nielson and Yue. Reconsideration and withdrawal of this rejection is therefore respectfully requested.

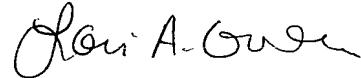
***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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